

MATERIAL SAFETY DATA SHEET

Part Number - C2060-8972

MSDS - 01-045

SECTION I

PRODUCT NAME OR NUMBER (as it appears on label) BARRIER TA L55/2	DATE PREPARED 26.Oct.1994
MANUFACTURER'S NAME NOK KLUBER Co., LTD	EMERGENCY TELEPHONE NO. 0293-42-5365 (JAPAN)
ADDRESS (Number, Street, City, and Zip Code) 831-2 KAMISOHDA, ISOHARA MACHI, KITAIBARAKI CITY, IBARAKI PREF, JAPAN	
CHEMICAL FAMILY Lubricant grease (fluoride base)	FORMULA (Molecular Weight) Proprietary mixture

SECTION II - INGREDIENTS (list all ingredients)

CAS REGISTRY NO.	XV	IV	CHEMICAL NAME(S)	Listed as a Carcinogen in WTP, IARC or OSHA 1910(x) (specify)
			This product doesn't contain a hazardous component	
	> 60 < 35 < 5		Perfluoropolyether Polytetrafluoroethylene additive	

SECTION III - PHYSICAL DATA

BOILING POINT	no data available	SPECIFIC GRAVITY (8@d=1)	approx 1.9	
VAPOR PRESSURE (at 20°C)	very little	PERCENT VOLATILE BY VOLUME(X)	0	PERCENT SOLID BY WEIGHT(Y) < 40
VAPOR DENSITY (AIR=1)	no data available	EVAPORATION RATE (Butyl Acetate = 1)	no data available	
SOLUBILITY IN WATER	not soluble	pH=	7	
APPEARANCE AND ODOR White and neutral order				IS MATERIAL liquid solid gas paste powder

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	non-flammable	FLAMMABLE LIMITS no data available	LEL _____	UEL _____
EXTINGUISHING MEDIA	non-flammable			
SPECIAL FIRE FIGHTING PROCEDURES	non-flammable			
UNUSUAL FIRE AND EXPLOSION HAZARDS	non-flammable			

SECTION V - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID:
	STABLE	○	
INCOMPATIBILITY (materials to avoid) : AlCl ₃ , SbF ₅ , CoF ₂			
HAZARDOUS DECOMPOSITION PRODUCTS: At temperature above 300°C, the product decomposes thermally and can release toxic fumes. Corrosive contact materials (e.g. Aluminium, Titanium and their alloys) may cause lower decomposition temperature.			
HAZARDOUS	MAY OCCUR		CONDITIONS TO AVOID:
POLYMERIZATION	WILL NOT OCCUR	○	

SECTION VI - HEALTH HAZARD DATA

EFFECT OF OVEREXPOSURE-Condition to Avoid
 eyes: mild irritation; skin: mild irritation, may cause dermatitis with repeated contact;
 ingestion: no more than slightly toxic if swallowed; inhalation: n/a

OTHER LIMIT
 LD₅₀ ≥ 37.4 g/kg (Perfluoropolyether, rat : on the analogy of similar article.)

PRIMARY ROUTES OF ENTRY Inhalation Skin Contact Other(specify)
 In case of swallowing it intentionally

EMERGENCY AND FIRST AID PROCEDURES
 eyes: flush with large amount of water; skin remove contaminated clothing, wash skin with
 soap and water, launder clothing prior to reuse; ingestion: contact doctor for directions.
 Never give anything by mouth to an unconscious person.

SECTION VII - SPILL, LEAK AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
 In case of accidental release or spill, eliminate free flames from the area, stop leak and
 absorb the liquid with sand or other absorbants and dispose of in accordance with the local,
 state, federal law and regulations.

WASTE DISPOSAL METHOD
 Dispose of in accordance with local, state federal laws and regulations, or destroy using
 a hightemperature incinerator designed to burn fluorine containing materials.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION(specify type)
 It's unnecessary when used under normal conditions.

VENTILATION Use with adequate ventilation when handled at temperatures above 200°C.

PROTECTIVE GLOVES(specify type) Glove of oil-resisting

EYE PROTECTION(specify type) Chemical goggles

OTHER PROTECTIVE EQUIPMENT
 It's unnecessary when used under normal conditions.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 Minimize skin contact, wash with soap and water, prior to eating, drinking, smoking or using
 sanitary facilities.

OTHER PRECAUTIONS
 Do not store near flammable or explosive materials, keep away from fire, heat sources or hot
 surfaces, do not smoke in working areas and avoid contamination of smoking products.

SECTION X - REGULATIONS

TRANSPORT :

HAZARD SYMBOLS :

OTHER INFORMATION :

MSDS No. 1083

This information corresponds with the state of our knowledge at the time of printing and is
 intended to give information of possible applications to a reader with technical experience.
 The assurance of properties, product responsibility or guarantee are impossible without our
 clarification as to the specific application of use and service conditions.